processing an output from a light sensor from a first time, in the local time frame, for a controlled first duration to control light output of the display at a second time, in the local time frame and after the first time, for a second duration; and

outputting light from the display only during the second duration, wherein the second duration is non-overlapping with the write duration.

2. The method as claimed in claim 1, comprising:

for each display period, causing synchronisation of a local time frame and refresh of a display.

3. The method as claimed in claim 1, comprising,

for each display period, processing an output from the light sensor from a first time, in the local time frame, for a first duration to control light output of the display at a second time, in the local time frame for a second duration.

4. The method as claimed in claim 1, wherein the first time and the second time occupy the same display period.

5. The method as claimed in claim 1, wherein the first time occupies a display period that precedes the display period occupied by the second time.

6. The method as claimed in claim 1, wherein the display period is less that a maximum time determined by an inverse of the flicker fusion frequency.

7. The method as claimed in claim 1 wherein, in each display frame, the first time is preceded by writing an image to the display.

8. The method as claimed in claim 1, wherein, in each display frame, an end of the second duration is followed by a blanking time.

9. The method as claimed in claim 1, wherein, in each display frame there is a duration for writing an image, the first duration for sensing, the second duration for illuminating, and a further duration for blanking.

10-25. (canceled)

26. An apparatus comprising:

at least one processor; and

at least one memory including computer program code

the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus at least to perform:

causing synchronization of a local time frame and refresh of a display;

writing an image to the display during a write duration;

processing an output from a light sensor from a first time, in the local time frame, for a controlled first duration to control light output of the display at a second time, in the local time frame and after the first time, for a second duration; and

outputting light from the display only during the second duration, wherein the second duration is non-overlapping with the write duration.

27. The apparatus as claimed in claim 26, comprising a light sensor.

28. The apparatus as claimed in claim 27, wherein the light sensor has multiple different spectral channels.

29. The apparatus as claimed in claim 27, wherein the light sensor is selected from the group comprising: an avalanche photodiode, a solid-state photo-multiplier tube, a PN-junction photodiode, a phototransistor, or any other light sensor with sufficient sensitivity and speed.

30. The apparatus as claimed in claim 26, wherein the apparatus is configured such that there are equivalent light paths, in opposite directions, for sensed ambient light and for emitted light.

31. The apparatus as claimed in claim 26, wherein the apparatus is configured such that an angular distribution of sensed ambient light is the same as an angular distribution of emitted light.

32. The apparatus as claimed in claim 26, wherein the apparatus is configured such that a spectral modulation of sensed ambient light by the apparatus is the same as a spectral modulation of emitted light by the apparatus.

33-39. (canceled)

40. A non-transitory computer readable medium storing a computer program that, when run on a computer, causes the method of claim 1 to be performed.

41. (canceled)

42-51. (canceled)

52. An apparatus comprising:

at least one processor; and

at least one memory including computer program code

the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus at least to:

switching a light source for a display off during a write duration and a first duration of a display period;

measuring ambient light during each first duration of a display period; and

switching the light source for the display on during a second duration of a display period with an adjusted light output, dependent on the measurement of ambient light made in the first duration of the display period, wherein the second duration does not overlap the write duration or overlap the first duration.

53-54. (canceled)

55. The apparatus as claimed in claim 26, further comprising:

an ambient light sensor configured to sense ambient light;

a light source configured to emit light; and

optics shared by the light sensor and the light source, wherein the optics is configured to provide equivalent light paths, in opposite directions, for ambient light sensed at the light sensor and for emitted light emitted from the light source.

56-66. (canceled)

67. The method as claimed in claim 1, wherein ambient light sensed during a sensing event in one display frame is used to adjust the light output of the display during a light output event of the same display frame, wherein each display frame comprises a single write duration, a first duration for the sensing event, a second duration for the light output event for displaying an image written during the write duration of the same frame.

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